

# Dryden Research Library Newsletter

## January 2004

Dryden Research Library is located in Bldg. 4800 Room 2412.

Check out our home page:

<http://www.dfrc.nasa.gov/Organizations/TechPubs/Library/index.html>

For any of your library needs please contact via email or call:

Barbara Rogers, the Librarian at ext. 3702,  
email: [barbara.rogers@dfrc.nasa.gov](mailto:barbara.rogers@dfrc.nasa.gov)

Renee Richardson, the Library Technician at ext. 3127,  
email: [renee.richardson@dfrc.nasa.gov](mailto:renee.richardson@dfrc.nasa.gov)

The Dryden Research Library staff are part of the ITI/SCSC Team and their Technical Monitor is Ron Ray, at ext.3687, email: <mailto:ron.ray@dfrc.nasa.gov>

### **THE 2003 TAX FORMS ARE NOW AVAILABLE IN THE LIBRARY.**

#### **Magazines:**

**Surplus of old magazines** - Hurry, Hurry, Hurry! For all you historical magazine collectors, please feel free to come by and help yourselves to the library's surplus magazines. It will be located outside of the library until January 31, 2004. Thank you!

**The Research Library is in need of 2003 issues of old magazines** - For those of you who subscribes to the following magazines, the library would like your old 2003 magazines. The library has not received a few issues in 2003 and would like to have our superseded magazines complete. Thank you in advance for your donations. The magazines are as follows:

1. Aeronautical Journal
2. Aerospace Science & Technology
3. Automatica
4. Discover
5. Electronic News
6. Flight International
7. Info World

8. Jane's Defense Weekly
9. Light Plane Maintenance
10. Machine Design
11. Monthly Weather Review
12. PC World
13. RC Modeler
14. Science
15. Scientific American
16. Success

## **New Books received in November and December, 2003 at the Dryden Research Library:**

### **Reference Books-**

JK 6 .F45 SPRING 2003	Federal yellow book
JK 1083 .B55 SPRING 2003	Congressional Yellow Book
RS 75 .P51 2002 56th ed.	Physicians' Desk Reference: PDR
TL 512 .U7 1999	United States space directory
TL 565 .A37 1981	Aerospace research index: a guide to world research in aeronautics, meteorology, astronomy, and space science
Z 1223 .Z7 N67 2001	Government information on the Internet

### **Circulating Books-**

TL 521.312 .W354 1996 c.7	Flights of Discovery: 50 years at the NASA Dryden Flight Research Center by Lane E. Wallace
TL 540 .W7 R46 2003	Wilbur & Orville Wright: a reissue of a chronology commemorating the Hundredth Anniversary of the birth of Orville Wright - August 19, 1871 by Arthur George Renstrom
TL 695 .F85 2001	Fundamental avionics, 2001 (Instructor David L. Stanislaw) (2 part set)
TL 862 .L35 C49 2003	Concept to reality: contributions of the NASA Langley Research Center to U.S. Civil Aircraft of the 1990s by Joseph R. Chambers

## **Library Tours and Orientation**

The NASA Dryden Research Library gives Library Tours and Orientation. They will be twice a month on Friday afternoons and take 30 minutes to an hour. This is available for Dryden employees or staff that would like more information on the Research Library services. A tour of the library facilities will be given, with handouts about library services. There will be demonstrations on searching several databases accessible from the Research Library website, including AIAA,

Science Direct, ASAP, DTRS, etc. You can bring information on topics you would like to search. Please call Barbara Rogers at ext. 3702 to schedule and appointment.

## **DRYDEN FLIGHT RESEARCH CENTER TECHNICAL REPORTS OFFICE FY-2003 PUBLICATIONS LIST**

The following reports were completed during FY-2003. Distribution has been completed for the paper copies, and NASA reports are available on the Dryden Technical Report Server.

Saltzman, Edwin J., K. Charles Wang, and Kenneth W. Iliff, *Aerodynamic Assessment of Flight-Determined Subsonic Lift and Drag Characteristics of Seven Lifting-Body and Wing-Body Reentry Vehicle Configurations*, NASA/TP-2002-209032, November 2002.

Diebler, Corey and Mark Smith, *A Ground-Based Research Vehicle for Base Drag Studies at Subsonic Speeds*, NASA/TM-2002-210737. Presented at the United Engineering Foundation conference on the Aerodynamics of Heavy Vehicles Trucks, Busses, and Trains, December 2-6, 2002, Monterey-Pacific Grove, California.

Bui, Trong T., Brett J. Pipitone, and Keith L. Krake, "In-Flight Capability for Evaluating Skin-Friction Gages and other Near-Wall Flow Sensors," AIAA-2003-0741. Presented at the 41st AIAA Aerospace Sciences Meeting & Exhibit, January 6-9, 2003, Reno, Nevada.

Gorn, Michael, "A Powerful Friendship: Theodore von Karman and Hugh L. Dryden," AIAA-2003-0289. Presented at the 41st Aerospace Sciences Meeting & Exhibit, January 6-9, 2003, Reno, Nevada.

Hakkinen, Raimo J., Jeremy S. Neubauer, Philip J. Hamory, Trong T. Bui, and Gregory K. Noffz, "Exploratory Calibration of Adjustable-Protrusion Surface-Obstacle (APSO) Skin Friction Vector Gage," AIAA-2003-0740. Presented at the 41st AIAA Aerospace Sciences Meeting & Exhibit, January 6-9, 2003, Reno, Nevada.

Bui, Trong T., Brett J. Pipitone, and Keith L. Krake, *In-Flight Capability for Evaluating Skin-Friction Gages and other Near-Wall Flow Sensors*, NASA/TM-2003-210738, February 2003.

Hakkinen, Raimo J., Jeremy S. Neubauer, Philip J. Hamory, Trong T. Bui, and Gregory K. Noffz, *Exploratory Calibration of Adjustable-Protrusion Surface-Obstacle (APSO) Skin Friction Vector Gage*, NASA/TM-2003-210739, February 2003.

Noffz, Gregory K., Adrienne S. Lavine, and Philip Hamory, *Experimental Evaluation of Hot Films on Ceramic Substrates Intended for Skin Friction Measurements*. NASA/TM-2003-210742, March 2003.

Whitmore, Stephen A. and Bonnie J. Dunbar, "Orbital Space Plane: Past, Present, and Future," AIAA-2003-2718. Presented at the AIAA/ICAS International Air and Space Symposium and Exposition: The Next 100 Years, July 14-17, 2003, Dayton, Ohio.

Voracek, David, Ed Pendleton, Kenneth Griffin, Eric Reichenbach, and Leslie Welch, *The Active Aeroelastic Wing, Phase I, Flight Research Through January 2003*, NASA/TM-2003-210741, April 2003.

Voracek, David, Ed Pendleton, Kenneth Griffin, Eric Reichenbach, and Leslie Welch, "The Active Aeroelastic Wing Flight Research Program," RTO Conference, AVT Symposium Novel and Emerging Vehicle and Vehicle Technology Concepts. Presented at the RTO meeting in Brussels, Belgium, April 7-9, 2003.

Horstmann, Karl Heinz, Hansgeorg Riedel, and David F. Fisher, "Flight Test Measurement Techniques for Laminar Flow," AGARDograph 300, Vol. Y, sent to RTA 4/23/03 for publication.

Brenner, Martin J. and Richard J. Prazenica, *Aeroservoelastic Model Validation and Test Data Analysis of the F/A-18 Active Aeroelastic Wing*, NASA/TM-2003-212021, May 2003.

Brenner, Martin J. and Richard J. Prazenica, "Aeroservoelastic Model Validation and Test Data Analysis of the F/A-18 Active Aeroelastic Wing." Presented at the CEAS/AIAA/MVVI International Forum on Aeroelasticity and Structural Dynamics, June 4, 2003, Amsterdam, The Netherlands.

Diebler, Corey and Mark Smith, *A Ground-Based Research Vehicle for Base Drag Studies at Subsonic Speeds*. Presented through NASA/TM-2002-210737 at the United Engineering Foundation (UEF) Conference on Aerodynamics of Heavy Vehicles, Trucks, Buses, and Trains, December 2002. This version reformatted to publish electronically for the conference by Springer-Verlag 2003.

Whiteman, Don and Robert Sakahara, "Space-Based Telemetry and Range-Safety Study Flight Test Results and Future Operational System Goals," ITC, meeting paper. Presented at the International Telemetry Conference, Las Vegas, Nevada, October 20-23, 2003.

Whiteman, Don, Robert Sakahara, and Ray Kolar, "Space-Based Telemetry and Range-Safety Study Transceiver and Phased-Array Antenna Development," ITC

meeting paper. Presented at the International Telemetry Conference, Las Vegas, Nevada, October 20-23, 2003.

Urschel, Peter H. and Timothy H. Cox, "Launch Condition Deviations of Reusable Launch Vehicle Simulations in Exo-Atmospheric Zoom Climbs," AIAA-2003-5544. Presented at the AIAA Atmospheric Flight Mechanics Conference and Exhibit, August 11-14, 2003, Austin, TX.

Jones, Thomas P. and Ethan Baumann, "Evaluation of the X-43A Scramjet Engine Controller Performance by Monte Carlo Technique," AIAA-2003-5192. Presented at the *39th AIAA/ASME/SAE/ASEE Joint Propulsion Conference and Exhibit*, Huntsville, Alabama, July 20-23, 2003.

Moes, Timothy R., Mark S. Smith, and Eugene A. Morelli, "Flight Investigation of Prescribed Simultaneous Independent Surface Excitations for Real-Time Parameter Identification," AIAA-2003-5702. Presented at the AIAA Atmospheric Flight Mechanics Conference, Aug 11-14, 2003, Austin, TX.

Hageman, Jacob J., Mark S. Smith, and Susan Stachowiak, "Integration of Online Parameter Identification and Neural Network for In-Flight Adaptive Control," AIAA-2003-5700. Presented at the AIAA Atmospheric Flight Mechanics Conference, August 11-14, 2003, Austin TX.

Smith, Mark S., Timothy R. Moes, and Eugene A. Morelli, "Real-Time Stability and Control Derivative Extraction From F-15 Flight Data," AIAA-2003-5701. Presented at the AIAA Atmospheric Flight Mechanics Conference, Aug 11-14, 2003, Austin, TX.

Allen, Michael J. and Ryan Dibley, "Modeling Aircraft Wing Loads from Flight Data Using Neural Networks," paper number 03WAC-2, presented at the SAE World Aviation Congress, Montreal, Quebec, Canada, September 8-12, 2003.

Allen, Michael J. and Ryan Dibley, *Modeling Aircraft Wing Loads from Flight Data Using Neural Networks*, NASA/TM-2003-212032, September 2003.

Smith, Mark S., Timothy R. Moes, and Eugene A. Morelli, *Real-Time Stability and Control Derivative Extraction From F-15 Flight Data*, NASA/TM-2003-202127, September 2003.

Grindle, Thomas J. and Frank W. Burcham, Jr., *Engine Damage to a NASA DC-8-72 Airplane From a High-Altitude Encounter With a Diffuse Volcanic Ash Cloud*, NASA/TM-2003-212030.

Urschel, Peter H. and Timothy H. Cox, *Launch Condition Deviations of Reusable Launch Vehicle Simulations in Exo-Atmospheric Zoom Climbs*, NASA/TM-2003-212023, September 2003.

Vachon, M. Jake, Ronald J. Ray, Kevin R. Walsh, and Kimberly Ennix, *F/A-18 Performance Benefits Measured During the Autonomous Formation Flight Project*, NASA/TM-2003-210734, September 2003.

Hanson, Curtis E., *A Fuzzy Technique for Performing Lateral-Axis Formation Flight Navigation Using Wingtip Vortices*, NASA/TM-2003-212033, September 2003.

Gorn, Michael, *A Powerful Friendship: Theodore von Kármán and Hugh L. Dryden*, NASA/TM-2003-212031, September 2003.